



**Country:** Cook Islands

**Location within the country:** Project sites are - Rakahanga, Manihiki, Nassau, Pukapuka and Penrhyn

**Project type:** Type 2

**Total requested budget:** EURO 400, 000.00

**Duration of project:** 3 years

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Climate Change Cook Islands

**Project title:** Northern Water Project (Phase 2)

**Background and rationale;**

The Northern islands of the Cook Islands (Pukapuka, Nassau, Penrhyn, Manihiki and Rakahanga) are low lying atolls and are therefore highly vulnerable to the impacts of natural disasters and climate change. During the 2004-05 cyclone seasons for the Cook Islands, the northern islands sustained significant destruction to infrastructure including substantial damages to community and household water catchments. In response, the Cook Islands and New Zealand Governments implemented the Northern Group Rain Water Harvesting Project.

The project repaired household roofs, installed domestic water tanks and new spouting, and provided training in water safety and tank system maintenance. This increased the capacity for rainwater storage at the household level.

However, the community water tanks on these islands are yet to be repaired. Repair and restoration of these water tanks will provide an additional 2,497,000 litres of water to the communities on these islands. Although this is deemed a priority for Government, tight fiscal conditions has hampered progress.

Repairing these community water tanks will improve water security for the northern islands. In doing so, enhance the resilience of these islands to natural disasters (including drought proofing) and strengthen disaster management capabilities aimed at increasing capacity for rainwater harvesting and storage. This is the goal of this project.

Increased capacity on the islands will be as follows:

Pukapuka	570,000 litres
Nassau	140,000 litres
Manihiki	540,000 litres
Rakahanga	295,000 litres

Penrhyn 952,000 litres

### **Objective (s)**

The project goal is to improve the resilience of *Pukapuka, Nassau, Manihiki, Rakahanga* and *Penrhyn* to natural disasters (including drought proofing) by increasing the capacity for rainwater harvesting and storage.

An important feature of the goal is to encourage sustainable growth of the selected islands with opportunities for employment, improved public health and well-being, and promote environmentally sustainable economic development.

The specific objectives are to:

1. Repair community water tanks in the northern islands of Pukapuka, Nassau, Manihiki, Rakahanga and Penrhyn;
2. Repair the structures/infrastructure that support rainwater harvesting and storage for the communities;
3. Increase water safety and use awareness in the community;

The project goal is aligned to the achievement of **Goal 5 – Resilient and Sustainable Communities** of the National Sustainable Development Plan 2011-2015, **Strategic Area Four - Risk Reduction and Climate Change Adaptation** of the Joint National Action Plan for Disaster Risk Reduction and Climate Change Adaptation 2011-2015. Water security is also a priority area in the National Infrastructure Investment Plan for the Cook Islands (NIIP).

### **Expected project outcomes:**

**1. Increased capacity for rainwater harvesting and storage**

*This will be achieved by repairing the damaged existing community water tanks on the islands.*

**2. Enhanced resilience on these islands to natural disasters and climate change (including drought proofing)**

*This will be achieved by having the community water tanks operational.*

**3. Improved water awareness of communities**

*This will be achieved through the implementation of a community water awareness and maintenance program.*

### **Expected project outputs:**

**1. Increased number of rain water harvesting catchment sites in the community**

**Output 1.1** - Damages to catchment areas and structures that once harvested rain water is assessed.

**Output 1.2** - Damages to existing community water tanks and structures are repaired.

**2. Increased water safety awareness in the community**

**Output 2.1** - Filtration systems to Community Water storage tanks maintained.

**Output 2.2** - Awareness programmes for water safety and use introduced into the community

**Output 2.3** - Water safety and maintenance inspections conducted regularly on community tanks by Island Governments and incorporated into Island Governments work plans.

**3. Community capacity to respond to water shortages is strengthened**

**Output 3.1** - Water shortage response plan developed

**Output 3.2** – Water shortage response plan tested annually

**Output 3.3** – Water shortage response plan reviewed biennially

### **Target group(s)**

#### **Beneficiaries:**

**Schools** – As some community tanks are located close to schools, the schools are able to use these. In the past, schools have closed down for health reasons as there was no water in their catchment tanks. Having community tanks nearby restored will alleviate this issue.

**Households** – All households have water tanks. However, long dry spells have resulted in water shortages. Restoration of community water tanks to full operation will ensure the affected community has additional supply of water.

**Community** – Having additional stored water in a small community is critical during dry spells. Although the restoration of community water tanks provides an emergency supply, the community will still conserve water at household level to ensure that extra supply is maintained and ready for emergencies.

**Island Administration and Island Council** – The Island Administration under the management of the Island Government will manage and maintain the community water tanks. They will regularly test the safety of the water at community and household storage points.

**Growing sectors** – Tourism, agriculture and fisheries activities in the respective communities will benefit directly from increased water supply.

#### Indicative budget

Item	Indicative description	Indicative budget (NZD\$)	SRIC-CC budget for Phase 2 Northern Water Project
<b>Documentation costs (Take Out and re-allocate funds to the below)</b>	<ul style="list-style-type: none"> <li>✓ Concept note</li> <li>✓ Project Document Design</li> <li>✓ Technical review</li> </ul>		In kind support
<b>Outcome 1 - Increased number of rain water harvesting catchment sites in the community</b>			
<p><b>Output 1.1</b> - Damages to catchment areas and structures that once harvested rain water are assessed.</p> <p><b>Output 1.2</b> - Damages to community water tanks and structures are repaired</p>	<ul style="list-style-type: none"> <li>✓ Contractual services</li> <li>✓ Technical support</li> <li>✓ Travel</li> </ul>	\$515,000.00	\$1,040,000.00
<b>Outcome 2 - Increased water safety awareness in the community</b>			
<p><b>Output 2.1</b> - Filtration systems to community water storage tanks maintained</p> <p><b>Output 2.2</b> - Awareness programmes for water safety and use introduced into the community</p> <p><b>Output 2.3</b> – Water safety and maintenance inspections conducted regularly on community water tanks by Island Governments and incorporated into Island Governments work plans</p>	<ul style="list-style-type: none"> <li>✓ Contractual services</li> <li>✓ Materials</li> <li>✓ Technical support</li> </ul>	\$25,000.00	\$40,000.00
<b>Outcome 3 - Community capacity to respond to water shortages is strengthened</b>			
<p><b>Output 3.1</b> - Water shortage response plan developed</p> <p><b>Output 3.2</b> – Water shortage response plan tested annually</p>	<ul style="list-style-type: none"> <li>✓ Materials</li> <li>✓ Technical support</li> </ul>	\$15,000.00	\$20,000.00

<b>Output 3.3 – Water shortage response plan reviewed biennially</b>			
<b>Project Management (3 years)</b>			
	<ul style="list-style-type: none"> <li>✓ Technical services - Coordination</li> <li>✓ Reporting</li> <li>✓ Audit</li> <li>✓ Office materials</li> <li>✓ Monitoring &amp; evaluation</li> </ul>	\$70,000.00	\$180,000.00
<b>TOTAL</b>		<b>\$625,000.00</b>	<b>\$1,280,000.00</b>

### Project management

#### **Office of the Prime Minister (Climate Change Cook Islands Division)**

It is envisaged that the existing ‘Strengthening the Resilience of our Islands and our Communities to Climate Change’ (SRIC-CC) Programme executed by the Climate Change Cook Islands (CCCI) division within the Office of the Prime Minister will manage the project. SRIC – CC has staff in the northern islands that can manage the implementation of the project at the island level. All SRIC CC Projects are aligned with national priorities. Currently the SRIC CC has 5 components:

1. Strengthening policies/ plans (including delivery of training) at National level to support Community level in the Pa Enea
2. Strengthening policies/ plans (including delivery of training) at administration at Pa Enea level to support the community level in the Pa Enea
3. Implementation of activities in Tourism, Health, Water, Coastal Protection, Agriculture and Marine and a Small Grants Programme.
4. Documenting and sharing of lessons learned and best practices
5. Programme management

The SRIC CC Programme meets the following reporting requirements;

1. Report monthly to Programme Advisory Committee (Advisory committee that provides advice to SRIC CC Programme – members represent key stakeholders)
2. Report monthly to Office of the Prime Minister
3. Report monthly to National Infrastructure committee (all Government projects are reported and coordinated here)
4. Report monthly to Minister (Agriculture to Minister of Agriculture, Water to Infrastructure Minister)
5. Report quarterly to UNDP
6. Report annually to Adaptation Fund Board
7. Report to respective Island Councils as required (needs basis)

The SRIC CC Programme has three full time staff (Programme Manager, Projects Officer and Finance and Admin Officer) and 11 part time staff each located on the 11 inhabited islands of the Cook Islands. Under the SRIC CC Programme, the entire team is able to support the EU-GIZ project. A project coordinator will be sought with this proposal to assist implementation and reporting requirements. The coordinator will be based in the OPM with the SRIC-CC team to ensure integration in implementation. When required, technical capacity may be engaged to implement certain parts of the project.

### **Implementing partner(s)**

Our partners include, Private sector, Community Administration and Government. At this stage, the Cook Islands have not yet identified a regional partner.

### **Complementarity and replication**

The SRIC-CC Programme is designed to establish a project governance and implementation structure from National to island level in all areas related to building resilience of islands and communities to disasters and climate change. The SRIC CC team coordinates delivery. This alleviates the issues around duplicating management structures and establishing numerous teams to manage projects, thus, ensuring that funds are utilised where it is needed most, in the community. The SRIC-CC Programme currently will contribute up to NZD\$1.28 Million in water infrastructure projects for selected islands and communities. The EU-GIZ concept will provide additional support to water projects and the achievement of greater water security and resilience in the Cook Islands.

### **Sustainability and risks**

**Please briefly explain how you will maintain sustainability of action after end of the project.**

Under the SRIC-CC Programme, sustainability of project outcomes is addressed in training and work plans including development of policies to support the delivery of work plans and the sustainability of the results. These activities target the time after the project ends. For example the SRIC-CC household water tank project for Atiu, Palmerston and Aitutaki has seen the delivery and installation of 1 x plastic 6,000 litre water tank each to 100% of households on these islands. The project includes training in water conservation and storing water safely awareness programme. It includes water catchment area maintenance (roofing area) checks by the Island Administration (including Health Officers) and awareness around cleaning and maintaining household water tank including the concrete tank base. The same principles will apply to this project. This ensures that any defects are detected and repaired.

**Briefly explain if there are any risks to the implementation and sustainability of the project and how these will be mitigated.**

Cyclone wind damage is a risk to exposed plastic water tanks and roof catchment areas. Part of the project includes awareness in tying down roofing including removing down piping water tanks to avoid “salt spray” (common on small atolls) from intruding into the stored water. In the case of the EU-GIZ funds, this will focus primarily on repair of existing 45,000 litre concrete water tanks, their roofing area including any damaged catchment structure. On-going maintenance of the community water tanks including catchment structures will be the responsibility of the Island Administration.

### **Timeline for planned measures**

**Please include a clear timeline for completion of the project, for example a Gantt chart;**

**Northern Water Implementation Schedule/ Gantt chart (Indicative)**

	Year 1	Year 2	Year 3	
<b>Outcome 1 - Increased capacity for rainwater harvesting and storage</b>				
Output 1.1	■	■	■	
Output 1.2		■	■	
All assessments completed		⊗		
All structural repairs completed			⊗	
<b>Outcome 2 - Increased water safety awareness in the community</b>				
Output 2.1		■	■	
Output 2.2		■	■	
Output 2.3		■	■	
Activities handed over to respective communities and administrations			⊗	
<b>Outcome 3 - Community capacity to respond to water shortages is strengthened</b>				
Output 3.1 - Water shortage response plan developed		■		
Output 3.2 – Water shortage response plan tested annually			■	

